

§ 90.541

47 CFR Ch. I (10–1–00 Edition)

(b) The frequency stability of base transmitters operating in the narrowband segment must be 100 parts per billion or better.

(c) The frequency stability of mobile, portable, and control transmitters operating in the narrowband segment must be 400 parts per billion or better when AFC is locked to the base station. When AFC is not locked to the base station, the frequency stability must be at least 1.0 ppm for 6.25 kHz, 1.5 ppm for 12.5 kHz (2 channel aggregate), and 2.5 ppm for 25 kHz (4 channel aggregate).

(d) The frequency stability of base transmitters operating in the wideband segment must be 1 part per million or better.

(e) The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

[63 FR 58651, Nov. 2, 1998, as amended at 65 FR 53646, Sept. 5, 2000]

EFFECTIVE DATE NOTE: At 65 FR 53646, Sept. 5, 2000, §90.539 was amended by revising paragraph (c), effective Nov. 6, 2000. For the convenience of the reader, the superseded text is set forth as follows:

§ 90.539 Frequency stability.

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(c) The frequency stability of mobile, portable and control transmitters operating in the narrowband segment must be 400 parts per billion or better when AFC is locked to a base station, and 2.5 parts per million or better when AFC is not locked.

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§ 90.541 Transmitting power limits.

The transmitting power of base, mobile, portable and control stations operating in the 764–776 MHz and 794–806

MHz frequency bands must not exceed the maximum limits in this section, and must also comply with any applicable effective radiated power limits in §90.545.

(a) The transmitting power of base transmitters must not exceed the limits given in paragraphs (a), (b) and (c) of §90.635.

(b) The transmitter output power of mobile and control transmitters must not exceed 30 Watts.

(c) The transmitter output power of portable (hand-held) transmitters must not exceed 3 Watts.

(d) Mobile and portable transmitters must be designed to employ automatic power control.

[63 FR 58651, Nov. 2, 1998]

EFFECTIVE DATE NOTE: At 65 FR 53646, Sept. 5, 2000, §90.541 was amended by removing paragraph (d), effective Nov. 6, 2000.

§ 90.543 Emission limitations.

Transmitters designed to operate in 764–776 MHz and 794–806 MHz frequency bands must meet the emission limitations in this section.

(a) The adjacent channel coupled power (ACCP) requirements for transmitters designed for various channel sizes are shown in the following tables. Mobile station requirements apply to handheld, car mounted and control station units. The tables specify a maximum value for the ACCP relative to maximum output power as a function of the displacement from the channel center frequency. In addition, the ACCP for a mobile station transmitter at the specified frequency displacement must not exceed the value shown in the tables. For transmitters that have power control, the latter ACCP requirement can be met at maximum power reduction. In the following charts, “(s)” means a swept measurement is to be used.

6.25 KHz MOBILE TRANSMITTER ACCP REQUIREMENTS

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACCP Relative (dBc)	Maximum ACCP Absolute (dBm)
6.25	6.25	–40	(¹)
12.5	6.25	–60	–45
18.75	6.25	–60	–45
25	6.25	–65	–50
37.5	25	–65	–50
62.5	25	–65	–50